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**United States Patent [19]****Hood, III****[11] Patent Number: 5,733,545****[45] Date of Patent: Mar. 31, 1998****[54] PLATELET GLUE WOUND SEALANT****[75] Inventor:** Andrew G. Hood, III, Redwood City, Calif.**[73] Assignee:** Quantic Biomedical Partners, Redwood City, Calif.**[21] Appl. No.:** 607,515**[22] Filed:** Feb. 27, 1996**Related U.S. Application Data****[63] Continuation-in-part of Ser. No. 398,022, Mar. 3, 1995, abandoned.****[51] Int. Cl. 6 A01N 63/00****[52] U.S. Cl. 424/93.72; 424/94.1; 424/94.64; 424/530; 424/532; 424/534; 424/529; 530/382****[58] Field of Search 424/94.1, 93.72, 424/94.64, 530, 532, 534, 529; 530/382****[56] References Cited****U.S. PATENT DOCUMENTS**

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**[57]****ABSTRACT**

A plasma-buffy coat concentrate that comprises plasma, platelets at a concentration of at least  $1.0 \times 10^9$  cells/ml, and fibrinogen at concentration of at least 5 mg/ml is described. The plasma-buffy coat concentrate can be combined with a fibrinogen activator to form a platelet glue wound sealant. A method for processing blood to produce the plasma-buffy coat concentrate is also provided. The method comprises centrifuging anticoagulated blood to remove red blood cells and produce a plasma-buffy coat mixture. Water is removed from the mixture to produce the plasma-buffy coat concentrate. A fibrinogen activator is mixed with the plasma-buffy coat concentrate to produce a wound sealant, which can then be applied to a wound to facilitate sealing and healing of the wound.